

## NOAA Hazardous Waste Site Report

Stauffer Chemical Company (X-2)  
Portland, Oregon  
April 13, 1984

### Location and Nature of Site:

Stauffer Chemical is an agricultural pesticide and herbicide manufacturing facility in operation since 1954. Liquid alum, a combination of bauxite and sulfuric acid, was also produced at the facility. From 1954-1973 contaminated alum sludge was discharged directly into the Columbia River.

The Stauffer property, in the North Portland Harbor industrial area, borders the Columbia River (Figure 1). The manufacturing plant is located 300 feet from the river. The property is within the 100-yard flood plain and drains towards the Columbia. Groundwater beneath the site also flows into the river.

### Proximity of Chemical Hazard to Marine Resources:

In addition to the direct alum discharges into the river, there is an alum sludge drying pond adjacent to the shoreline, and up until 1973 equipment washwater from agricultural chemical production was disposed of on-site. Other waste materials were also buried on-site.

DDT, DDE, DDD, and chlordane have been found in both the groundwater and soil at the site. Alum wastes continue to leach contamination into the water. The soil is contaminated with high concentrations of these pesticides, averaging 60 ppm. Groundwater contamination is as high as 41 ppb. Groundwater pH ranges from 3.9 to 6.8 (3).

### Marine Resources at Risk:

The North Portland Harbor is a commercial and recreational fishery and a migratory route and nursery area for salmon (Table 1). Nearby Hayden Island is a shorebird, wading bird, and waterfowl wintering area and waterfowl breeding area. Shillapoo Wildlife Recreation Area, located five miles downstream, is a waterfowl and a great blue heron nesting area.

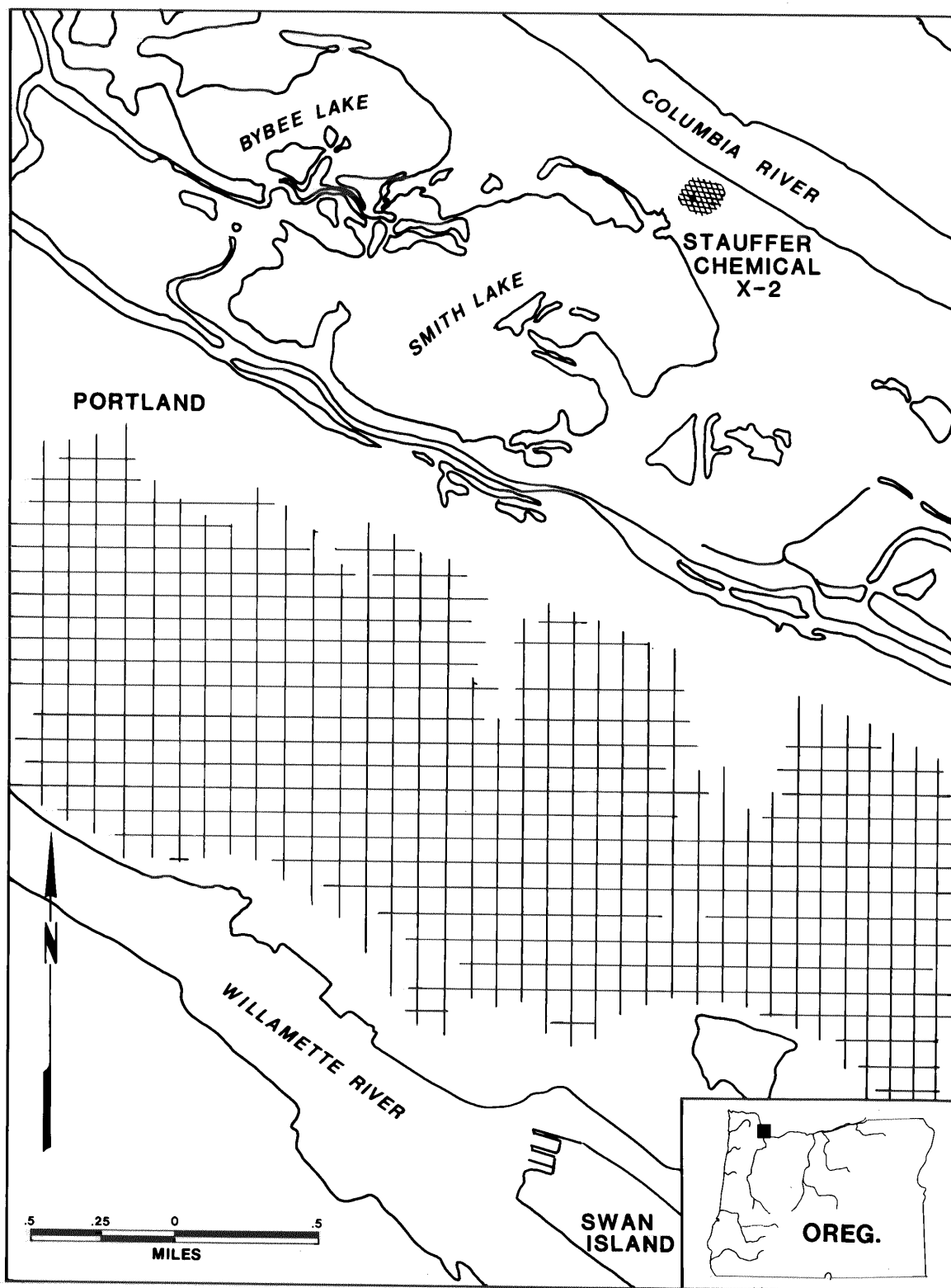


FIGURE 1. Site location.

Table 1. Fishery Resources of the Columbia River (1,2)

Finfish Species	Adult Habitat	Spawning Area	Nursery Area	Comm. Fish.	Rec. Fish.	Migr. Route
<u>Anadromous</u>						
Chinook salmon		x	x		x	x
Coho salmon		x	x		x	x
Steelhead trout		x	x		x	x
American shad		x	x		x	x
Sturgeon	x	x	x		x	
Sockeye salmon		x	x		x	x
Chum salmon		x	x		x	x
<u>Non-anadromous</u>						
Yellow perch	x	x	x		x	
Rainbow trout	x		x		x	
Cutthroat trout	x		x		x	
Carp	x	x	x	x	x	

Summary of Site-Related Actions:

Environmental and human health concerns of the Oregon Department of Ecology prompted EPA's investigation of this site. The site is currently under consideration for ranking on the National Priorities List. Sampling conducted during the site investigation was concentrated in the area of the alum sludge. There may be other contaminated areas on the site.

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References

1. Pruter, A. and D. Alverson (eds.), 1972. The Columbia River Estuary and Adjacent Ocean Waters - Bioenvironmental Studies. University of Washington Press.
2. Southerland, G., 1979. Oil Spill Protection Plan for the Natural Resources of the Lower Columbia and Willamette Rivers. Oregon Department of Land Conservation Development.
3. Ecology and Environment, 1984. Field Investigation of Groundwater and Sediments Adjacent to the Stauffer Chemical Company. Prepared for the U.S. Environmental Protection Agency.